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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/773,539	<b>Applicant(s)</b> RUTH ET AL.	
	<b>Examiner</b> Jason M. Borlinghaus	<b>Art Unit</b> 3628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on 06 May 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 19-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 19-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 101*

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**Claim 12 – 16** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract that do not apply, involve, use, or advance the technological arts fail to promote the “progress of science and the useful arts” and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

In the present case, Claims 12 – 16 only recite an abstract idea. Claims 12 – 16 do not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use a pencil and paper.

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In the present case, none of the recited steps are directed to anything in the technological arts as explained above with the exception of the recitation in the preamble that the method is "computer-implemented". Looking at the claims as a whole, nothing in the body of the claims recites any structure or functionality to suggest that a computer performs the recited steps. Therefore, the preamble is taken to merely recite a field of use.

Although the recited process produces a useful, concrete, and tangible result, since the claimed invention, as a whole, is not within the technological arts as explained above, Claims 12 – 16 are deemed to be directed to non-statutory subject matter.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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**Claims 1, 3 – 4, 6, 8 – 12 and 14 – 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Landry (U.S. Patent 5,956,700) in view of Kelliher (U.S. Patent 5,857,194).

**Regarding Claim 1**, Landry discloses a system for administering a financial program involving the collection of payments, comprising:

- a debit system for coordinating the administration of the financial program (“The generated bill records are used by the TCF message generator to generate the EFT messages for transferring funds electronically between payors and payees.” – see abstract) including:
- interface logic for allowing a user to interact with the debit system (“The system includes a payor control interface... The bill generator may also generate bill records from the payor and payee information and from bill data messages received from payees.” – see abstract);
- batch processing logic for performing batch processing associated with the financial program (“For example, while the payment processing and maintenance portions of the method have been described as batch-mode oriented, it may become desirable and/or feasible in some applications to implement these steps in real time.” – see col. 37, lines 12 – 17);
- at least one support system coupled to the debit system for handling an aspect of the administration of the financial program (“The central computer of Fig. 3 also executes exemplary software modules to, for example, perform (a) database management functions, (b) file handling

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batch operations, (c) settlement processing, and/or (d) reporting functions.” – see col. 25, lines 61 – 64), and for communicating with the debit system (“The system includes a payor control interface, communications interface...” – see abstract); and

- a data storage for storing data tables used by the debit system in the administration of the financial program (“The bill generator generates bill records from payor and payee information stored within the system for recurring bills.” – see abstract), the data storage also including a representation of information as maintained by another system (“Additional peripheral equipment (e.g. tape drives, printer, conventional mass storage device, and conventional interface/multiplexer) to facilitate communicates and/or bill paying transactions may also be appropriate in many applications, and some examples of such equipment are provided herein or are apparent to those skilled in the art.” – see col. 26, lines 5 – 10 – establishing that additional data storage may be connected to the system).

Landry does not teach that the data storage also includes a representation of information as maintained by a retired system previously used for administering the financial program.

Kelliher discloses the retrieval of information (data) as maintained by a retired (legacy) system previously used for administering the financial program. (“The present invention analyses an existing legacy system, such as a Physician’s Office Management System, and automatically extracts, reformats,

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and sends required data to a service company, which may be for example, an insurance company.” – see abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Landry by incorporating the ability to retrieve information from a retired system, as was done by Kelliher, to allow for easy integration of a new debit system to an existing insurance and billing information source.

**Regarding Claim 3**, Landry discloses that the batch processing logic (“For example, while the payment processing and maintenance portions of the method have been described as batch-mode oriented, it may become desirable and/or feasible in some applications to implement these steps in real time.” – see col. 37, lines 12 – 17) includes logic for receiving notification of payments from a funds collector (“Each of the transmitted debit messages that correspond to a particular Payee are accumulated and are used to generate a settlement message.” – see col. 12, lines 15 – 17).

**Regarding Claim 4**, Landry discloses that the batch processing logic includes logic for interacting with the at least one support system. (“The central computer of Fig. 3 also executes exemplary software modules to, for example, perform (a) database management functions, (b) file handling batch operations, (c) settlement processing, and/or (d) reporting functions.” – see col. 25, lines 61 – 64).

**Regarding Claim 6**, Landry discloses a system wherein the financial program involves the performance of plural processing routines (multiple

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processors) to handle different aspects of the financial program, and the system includes functionality that facilitates interaction (interprocessor interbus) between these different processing routines. ("In a preferred arrangement, central computer is a mainframe computer of conventional design including, for example, symmetrical multiple processors with an interprocessor interbus." – see col. 25, line 65 – col. 26, line 66).

**Regarding Claim 8**, Landry discloses a system wherein the financial program ("System and Method for Paying Bills and Other Obligations Including Selective Payor and Payee Controls" – see title) is an insurance program. ("As seen in the above example, the payor's insurance premium is automatically paid each period and the payor takes negative action, or no action, to pay such bill." – see col. 5, lines 32 – 35 – establishing that financial program is an insurance program).

**Regarding Claim 9**, Landry discloses a system wherein the insurance program includes payment due dates occurring weekly or monthly (periodic). ("The payee information and bill data preferably includes provisional periods, bill amounts and due dates. The payor information for each payor preferably includes payor determined preferences for payment timing, maximum payment amount, and minimum interval for billing and/or payment for each particular payee." – see col. 7, lines 1 – 8). ("In its simplest form, bill generator may use the Payee Information in the Payor Database to generate bill records at predetermined times. These times for bill record generation may be defined as periodic, i.e. daily or the like, or as having a relationship to Payor or Payee



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Information, such as a number of days prior to a due date.” – see col. 11, line 64 – col. 12, lines 4).

**Regarding Claim 10**, Landry discloses a system wherein the system is implemented as a server in the context of a client server architecture (see figure 3, LAN-attached CSR terminals).

**Regarding Claim 11**, Landry does not teach a system wherein the data storage is implemented as a relational database.

Kelliher discloses a system wherein the data storage is implemented as a relational database. (“In legacy systems using relational database designs, a query in Structured Query Language (SQL) is first attempted to try determine the schema, defining the field names, the field types, the order of the fields.” – see col. 4, lines 8 – 11).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Landry by implementing the data storage as a relational database, as was done by Kelliher, to allow for easy and quick of retrieval of insurance and billing information from the database.

**Regarding Claim 12**, Landry discloses a method for administering a financial program involving the collection of payments, including:

- providing a debit service for coordinating the administration of the financial program. (“The generated bill records are used by the TCF message generator to generate the EFT messages for transferring funds electronically between payors and payees.” – see abstract), the debit service being coupled to a data storage (“The bill generator

generates bill records from payor and payee information stored within the system for recurring bills.” – see abstract), the data storage also including a representation of information as maintained by another system (“Additional peripheral equipment (e.g. tape drives, printer, conventional mass storage device, and conventional interface/multiplexer) to facilitate communicates and/or bill paying transactions may also be appropriate in many applications, and some examples of such equipment are provided herein or are apparent to those skilled in the art.” – see col. 26, lines 5 – 10 – establishing that additional data storage may be connected to the system);

- providing an interface for interacting with the debit service. (“The system includes a payor control interface... The bill generator may also generate bill records from the payor and payee information and from bill data messages received from payees.” – see abstract);
- receiving a request, via the interface, from a user for information regarding a financial policy. (Landry discloses “Database management may be provided for retrieval of files for various on-line and off-line manipulation herein, by any of a number of available products in the industry, or custom written for the particular application.” - see col. 26, lines 1 – 4 – establishing that information can be requested from the system which would necessitate the presence of a user interface);
- determining whether the policy may be obtained from the converted records stored in the data storage. (However, Landry discloses his

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system "...locate the payor record..." - see fig. 19K - establishing that Landry searches data storage for records); and

- retrieving the policy from the converted records if the policy may be obtained 15 therefrom. (However, Landry discloses his system "...locate the payor record and access the data within..." - see fig. 19K - establishing that Landry retrieves record if available.)

Landry does not teach a method for administering a financial program involving the collection of payments, including:

- the data storage including converted records as well as a representation of information as maintained by a retired system previously used for administering the financial program; and
- retrieving the policy from the representation of information as maintained by the retired system if the policy cannot be obtained from the converted records.

Kelliher discloses a method for administering a financial program involving the collection of payments, including:

- the data storage including converted (reformatted) records (data) as well as a representation of information as maintained by a retired (legacy) system previously used for administering the financial program. ("The present invention analyses an existing legacy system, such as a Physician's Office Management System, and automatically extracts, reformats, and sends required data to a service company,

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which may be for example, an insurance company.” – see abstract);

and

- retrieving the policy from the representation of information as maintained by the retired system if the policy cannot be obtained from the converted records. (“The present invention analyses an existing legacy system, such as a Physician’s Office Management System, and automatically extracts, reformats, and sends required data to a service company, which may be for example, an insurance company.” – see abstract)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Landry by incorporating the ability to retrieve information from a retired system, as was done by Kelliher, to allow for easy integration of a new debit system to an existing insurance and billing information source.

**Regarding Claim 14**, Landry does not teach a method wherein the policy obtained from the representation of information as maintained by the retired system pertains to a policy that was not transferred to the debit service upon introduction of the debit service.

Kelliher discloses a method wherein the policy obtained from the representation of information as maintained by the retired system pertains to a policy that was not transferred to the debit service upon introduction of the debit service. (“The present invention analyses an existing legacy system, such as a Physician’s Office Management System, and automatically extracts, reformats,

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and sends required data to a service company, which may be for example, an insurance company.” – see abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Landry by incorporating the ability to retrieve information from a retired system, as was done by Kelliher, to allow for easy integration of a new debit system to an existing insurance and billing information source.

**Regarding Claim 15**, Claim 15 recites similar limitations to Claim 8 and is therefore rejected using the same art and rationale as applied in the rejection of Claim 8.

**Regarding Claim 16**, Claim 16 recites similar limitations to Claim 9 and is therefore rejected using the same art and rationale as applied in the rejection of Claim 9.

**Claims 2, 5, 7, 13 and 19 - 21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Landry in view of Kelliher, and further in view of Ryan (U.S. Patent 5,655,085).

**Regarding Claim 2**, Landry discloses a system wherein the interface logic includes at least one of:

- interface logic for performing policy maintenance. (“The central computer of Fig. 3 also executes exemplary software modules to, for example, perform (a) database management functions, (b) file handling

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batch operations, (c) settlement processing, and/or (d) reporting functions.” – see col. 25, lines 61 – 64);

- interface logic for administering billing and premium payment (“In its simplest form, bill generator may use the Payee Information within the Payee Database as a recurring datafile to search the Payor Information in the Payor Database to generate bill records at predetermined times...Using the generated bill records, the TCF message generator generates, at predetermined times, Electronic Funds Transfer (EFT) messages that debit Payor Bank Accounts through some type of TCF transfer system.” – see col. 11, line 64 - col. 12, line 13); and
- interface logic for performing system-related maintenance (“The central computer of Fig. 3 also executes exemplary software modules to, for example, perform (a) database management functions, (b) file handling batch operations, (c) settlement processing, and/or (d) reporting functions.” – see col. 25, lines 61 – 64).

Laundry does not teach:

- interface logic for performing waiver processing
- interface logic for performing loan processing
- interface logic for performing cash surrender value processing
- interface logic for performing extended value processing

Kelliher discloses a system wherein the interface logic includes:

- interface logic for accessing the representation of information as maintained by the retired system. ("The present invention analyses an existing legacy system, such as a Physician's Office Management System, and automatically extracts, reformats, and sends required data to a service company, which may be for example, an insurance company." – see abstract).

Ryan discloses a system wherein the interface logic includes:

- interface logic for performing waiver processing. ("In Block 94, Solicit Additional Coverages, the system solicits any additional coverages desired by the client... Screen 7, for example, shows several riders potentially made available by the system. A waiver of annual premium benefit provides the premiums will be automatically waived in the event of policyholder disability." – see col. 18, lines 5 – 12);
- interface logic for performing loan processing. ("The invention includes automated aspects of the use of premiums paid on life insurance as a substitute for the initial down payment on a mortgage, the use of life insurance policy death benefits to retire the mortgage upon the death of the borrower, the use of accumulated cash values to retire the outstanding principal on a mortgage in the event of the borrower's survival, and the services of storage and transmission for all of the foregoing." – see col. 1, lines 24 – 31);
- interface logic for performing cash value surrender processing. ("The cash value term, CV(12t), is the illustrated cash value at the end of

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policy year t. The Surrender Cost Index is typically computed for years 10 and 20 of the policy.” – see col. 47, lines 31 – 34); and

- interface logic for performing extended value processing. (“The cash value term, CV(12t), is the illustrated cash value at the end of policy year t. The Surrender Cost Index is typically computed for years 10 and 20 of the policy.” – col. 47, lines 31 – 34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Landry by incorporating the ability to retrieve information from a retired system, as was done by Kelliher, to allow for easy integration of a new debit system to an existing insurance and billing information source, and by incorporating the ability to handle other traditional insurance functions, as was done by Ryan, to further integrate multiple insurance functions into one insurance system.

**Regarding Claim 5**, neither Landry nor Kelliher teach a system wherein the at least one support system comprises one of:

- a death claims system for handling insurance claims pertaining to deaths;
- a matured endowment system for handling matured endowment-related matters; and
- a waiver of premium system for handling waiver of premium processing.

Ryan discloses a system wherein the at least one support system comprises one of:



- a death claims system for handling insurance claims pertaining to deaths ("In Block 146, Compute Specified Amount, the system uses the guideline values previously computed to calculate a Specified Amount. The Specified Amount is the amount that the insurance company will pay the beneficiary upon the death of the insured." – see col. 20, lines 21 – 26);
- a matured endowment system for handling matured endowment-related (face amount payable to the insured) matters ("In Block 146, Compute Specified Amount, the system uses the guideline values previously computed to calculate a Specified Amount. The Specified Amount is the amount that the insurance company will pay the beneficiary upon the death of the insured. In most states the Specified Amount must by law appear on page three of a life insurance policy. The Specified Amount is a common life insurance variable and is equal to the basic, stated policy death benefit (the face amount of the policy.)" – see col. 20, lines 21 – 29); and
- a waiver of premium system for handling waiver of premium processing. ("In Block 94, Solicit Additional Coverages, the system solicits any additional coverages desired by the client...Screen 7, for example, shows several riders potentially made available by the system. A waiver of annual premium benefit provides the premiums will be automatically waived in the event of policyholder disability." – see col. 18, lines 5 – 12).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Landry by incorporating the ability to handle other traditional insurance functions, as was done by Ryan, to further integrate multiple insurance functions into one insurance system. Regarding

**Claim 7**, Laundry does not teach a system wherein the interface logic for accessing the representation of information as maintained by the retired system includes logic for retrieving policy information therefrom.

Kelliher discloses a system wherein the interface logic for accessing the representation of information (data) as maintained by the retired (legacy) system includes logic for retrieving policy information therefrom. ("The present invention analyses an existing legacy system, such as a Physician's Office Management System, and automatically extracts, reformats, and sends required data to a service company, which may be for example, an insurance company." – see abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Landry by incorporating the ability to retrieve information from a retired system, as was done by Kelliher, to allow for easy integration of a new debit system to an existing insurance and billing information source.

**Regarding Claim 13**, Claim 13 recites similar limitations to Claim 2 and is therefore rejected using the same art and rationale as applied in the rejection of Claim 2.

**Regarding Claim 19,** Claim 19 recites similar limitations to Claim 1 and 2 and is therefore rejected using the same art and rationale as applied in the rejection of Claim 1 and 2.

**Regarding Claim 20,** Landry discloses a medium wherein the financial program ("System and Method for Paying Bills and Other Obligations Including Selective Payor and Payee Controls" – see title) is an insurance program. ("As seen in the above example, the payor's insurance premium is automatically paid each period and the payor takes negative action, or no action, to pay such bill." – see col. 5, lines 32 – 35 – establishing that financial program is an insurance program).

**Regarding Claim 21,** Landry discloses a medium wherein the insurance program includes payment due dates occurring weekly or monthly (periodic). ("The payee information and bill data preferably includes provisional periods, bill amounts and due dates. The payor information for each payor preferably includes payor determined preferences for payment timing, maximum payment amount, and minimum interval for billing and/or payment for each particular payee." – see col. 7, lines 1 – 8). ("In its simplest form, bill generator may use the Payee Information in the Payor Database to generate bill records at predetermined times. These times for bill record generation may be defined as periodic, i.e. daily or the like, or as having a relationship to Payor or Payee

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Information, such as a number of days prior to a due date.” – see col. 11, line 64 – col. 12, lines 4).

### ***Response to Arguments***

Applicant's arguments filed 5/6/05 have been fully considered but they are not persuasive.

**Regarding the §101 rejection**, applicant disputes examiner's earlier §101 rejection based upon the lack of “technological arts” and examiner's earlier finding that the claims related to non-statutory subject. Applicant stated that he is unaware on any “technological arts” requirement established by the Patent Statute or by precedent “requiring an applicant to recite structure in a method claim.” (see Argument, page 9). Examiner asserts that there is a “technological arts” requirement and, furthermore, the applicant's inclusion in the claim preamble of the phrase “computer-implemented method” still fails to bring the method claims within the bounds of statutory subject matter.

The examiner argues that the phrase “technological arts” has been created and used by the courts to offer another view of the term “useful arts.” See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the “technological arts.”

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include “laws of

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nature," "natural phenomena," and "abstract ideas." See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998). This addresses the second test under 35 U.S.C § 101 of whether or not an invention is eligible for a patent. The Manual of Patent Examining Procedure reiterates this point. More specifically, MPEP § 2106(II)(A) states, "The claimed invention as a whole must accomplish a practical application. That is, it must produce a 'useful, concrete and tangible result.' *State Street*, 149 F.3d at 1373, 47 USPQ2d at 1601-02." Furthermore, "Only when the claim is devoid of any limitation to a practical application in the technological arts should it be rejected under 35 U.S.C. 101." (MPEP § 2106(II)(A))

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts." The court developed a "technological arts" analysis:

The “technological” or “useful” arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it “enhances” the operation of a machine. *In re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the “technological art” because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the “mathematical exception” using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a “useful, concrete and tangible result.” See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no “business method exception” since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that “[w]hether the patent’s claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112.” See *State Street Bank & Trust Co.* at 1377. Both of

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these analyses go towards whether the claimed invention is non-statutory because of the presence of an abstract idea. *State Street* never addressed the first part of the analysis, i.e., the “technological arts” test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) *was already determined to be within the technological arts* under the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences in affirming a §101 rejection finding the claimed invention to be non-statutory for failing the technological arts test. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

What is indeed important to note in the *Bowman* decision is that the Board acknowledged the dichotomy of the analysis of the claims under 35 U.S.C. § 101, thereby emphasizing the fact that not only must the claimed invention produce a “useful, concrete and tangible result,” *but that it must also be limited to the technological arts* in order to be deemed statutory under the guidelines of 35 U.S.C. § 101. The Board very explicitly set forth this point:

[1] We agree with the examiner. Appellant has carefully avoided tying the disclosed and claimed invention to any technological art or environment. As noted by the examiner, the disclosed and claimed invention is directed to nothing more than a human making mental computations and manually plotting the results on a paper chart [answer, page 5]. The Examination Guidelines for Computer-Related Inventions are not dispositive of this case because there is absolutely no indication on this record that the invention is connected to a computer in any manner.

Despite the express language of 35 U.S.C. §101, several judicially created exceptions have been

excluded from subject matter covered by Section 101. These exceptions include laws of nature, natural phenomenon, and abstract ideas. See *Diamond v. Diehr*, 450 U.S. 175, 185, 209 USPQ 1, 7(1981). We interpret the examiner's rejection as finding that the claimed invention before us is nothing more than an abstract idea because it is not tied to any technological art or environment. Appellant's argument is that the physical (even manual) creation of a chart and the plotting of a point on this chart places the invention within the technological arts.

The phrase "technological arts" has been created to offer another view of the term "useful arts." The Constitution of the United States authorizes and empowers the government to issue patents only for inventions which promote the progress [of science and] the useful arts. We find that the invention before us, as disclosed and claimed, does not promote the progress of science and the useful arts, and does not fall within the definition of technological arts. The abstract idea which forms the heart of the invention before us does not become a technological art merely by the recitation in the claim of "transforming physical media into a chart" [sic, drawing or creating a chart] and "physically plotting a point on said chart."

In summary, we find that the invention before us is nothing more than an abstract idea which is not tied to any technological art, environment, or machine, and is not a useful art as contemplated by the Constitution of the United States. The physical aspects of claim 1, which are disclosed to be nothing more than a human manually drawing a chart and plotting points on this chart, do not automatically bring the claimed invention within the technological arts. For all these reasons just discussed, we sustain the examiner's rejection of the appealed claims under 35 U.S.C. §101. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669, 1671 (BdPatApp&Int 2001)

Similarly, in the present application, Claims 12-15, as originally written, are deemed to be non-statutory because they are not limited to the technological arts; some of the recited steps could be construed to be being performed



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manually by a human. As an example, "...receiving a request, via the interface..." (see Claim 12) could indicate that a person receives a request from a person via a telephone, an interface, or via graphic user interface of a computer, and "...determining whether the policy may be obtained from the converted records stored in the data storage..." (see Claim 12) could indicate a person manually searching through paper files in a file cabinet, a data storage unit, or a program is analyzing a records database.

Furthermore, a mere nominal or trivial reference to technology in a preamble does not correct this deficiency. The examiner argues that the "technological arts" must breath life into the claim and not be utilized as a draftsman's tool to cloak, otherwise, unstatutory subject matter with the mere guise of patentability. See *Diamond, Commissioner of Patents and Trademarks v. Diehr and Lutton*, 209 USPQ 1 (US SupCt 1981.) The Supreme Court explicitly set forth their concerns:

We have before us today only the question of whether respondents' claims fall within the §101 categories of possibly patentable subject matter. We view respondents' claims as nothing more than a process for molding rubber products and not as an attempt to patent a mathematical formula. We recognize, of course, that when a claim recites a mathematical formula (or scientific principle or phenomenon of nature), an inquiry must be made into whether the claim is seeking patent protection for that formula in the abstract. A mathematical formula as such is not accorded the protection of our patent laws, *Gottschalk v. Benson*, supra, and this principle cannot be circumvented by attempting to limit the use of the formula to a particular technological environment. *Parker v. Flook*, supra. Similarly, insignificant post-solution activity will not transform an unpatentable

principle into a patentable process. Ibid. **To hold otherwise would allow a competent draftsman to evade the recognized limitations on the type of subject matter eligible for patent protection. On the other hand, when a claim containing a mathematical formula implements or applies that formula in a structure or process which, when considered as a whole, is performing a function which the patent laws were designed to protect (e.g., transforming or reducing an article to a different state or thing), then the claim satisfies the requirements of §101.** Because we do not view respondents' claims as an attempt to patent a mathematical formula, but rather to be drawn to an industrial process for the molding of rubber products, we affirm the judgment of the Court of Customs and Patent Appeals.

In conclusion, the Examiner submits that Claims 12-16 do not meet the technological arts requirement under 35 U.S.C. § 101, as articulated in *Musgrave* and *Toma*, and that the minor alteration of the claim preamble in the amendments *when considered as a whole* do not correct this deficiency.

**Regarding the § 103 rejection**, the applicant disputes the examiner's combination of Landry, a financial billing system, and Kelliher, a system that retrieves data from a legacy system, specifically a physician's office management system. Applicant's argument is that the combination of references fail, "to teach the claimed interrelationship of a system for administering a financial program and the retired system previously used for administering the financial system" (see Argument, page 11). Applicant further argues that it would not have been obvious since neither prior art "suggests the generation of any such new debit system" (see Argument, page 12) to which retrieved data could be transferred.

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Finally, applicant argues that, "Kelliher teaches the extraction of data from a physician's office management system and sending the data to a service company. Such two respective systems are not used to administer a single financial program." (see Argument, page 12).

However, examiner was utilizing Kelliher merely to demonstrate that the analysis, extraction and transmission of data from one system for transmission to another system is well known in the computer arts. As Kelliher states, **"It is sometimes necessary to transmit information from an existing system, a legacy system, to other systems** each having a required transmission format. **This is the case in many areas** but especially for Physician Office Management Systems..." (see col. 1, lines 23 – 25). As Kelliher indicates the concept of retrieving information from one system, such as a retired or obsolete system, to another system, such as a new system, is a well-recognized and documented concept in the computer arts. Furthermore, Kelliher indicates that transmission of data from one system to another is not a unique concern to Physician Office Management Systems but is "the case in many areas" and, therefore, Kelliher should be applied to other non-physician office systems, such as financial systems.

In conclusion, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Landry by incorporating the ability to analyze, retrieve, reformat and transmit data, as disclosed by Kelliher, from the retired billing system to the new

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billing system to allow for easy integration of a new financial and billing system with a retired financial and billing system.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Borlinghaus whose telephone number is (571) 272-6924. The examiner can normally be reached on 8:30am-5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung Sough can be reached on (571) 272-6799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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